

IN THE CLAIMS

Please amend the claims as follows.

For the Examiner's convenience, a list of all claims is included below.

1. (Currently Amended) A method comprising:

recognizing that a primary device attached to a storage location has been placed in a power saving mode;
switching file access control of the primary device's storage location from the primary device to an audio device after the primary device has been placed in a power saving mode, and recording audio files to the primary device's storage location while the primary device is in the power saving mode, wherein the recording includes
processing a sound by a digital signal processor (DSP); and
passing a processed sound from the DSP through a controller- to-DSP gateway to a
microcontroller to send to the primary device's storage location.

2. (Original) The method of claim 1 further comprising, the primary device sending a signal to the audio device to alert the audio device that the primary device has been placed in a power saving mode.

3. (Original) The method of claim 1 further comprising, switching control of the primary device's storage location and the primary device's CODEC to the audio device upon a user request, while the primary device is not in a power saving mode.

4. (Original) A method as in claim 1, wherein the audio device is installed within the primary device.

BEST AVAILABLE COPY

5. (Original) A method as in claim 1, wherein the audio device is external to the primary device.

6. (Original) A method as in claim 5, wherein the audio device is coupled to the primary device through a USB connection.

7. (Original) A method as in claim 1, wherein the primary device comprises a laptop computer.

8. (Previously Presented) A method as in claim 1, wherein the audio device includes an interface to a CODEC, which is a combination of hardware and software that converts analog sound, speech and/or video to digital code (analog to digital) and also converts digital code to analog sound, speech and/or video (digital to analog).

9. (Previously Presented) A method as in claim 1, wherein the audio device includes an interface to a CODEC, which is hardware that converts analog sound, speech and/or video to digital code (analog to digital) and also converts digital code to analog sound, speech and/or video (digital to analog).

10. (Previously Presented) A method as in claim 1, wherein the audio device includes an interface to a CODEC, which is a medium including data that when accessed by the audio device, cause the audio device to convert analog sound, speech and/or video to digital code (analog to digital) and also converts digital code to analog sound, speech and/or video (digital to analog).

11. (Currently Amended) A method comprising:

searching a storage location for a digital signal processor (DSP) boot program;

providing the DSP with the boot program;

searching for updates to the DSP boot program;

providing the DSP with the updates for the DSP boot program, and wherein the providing includes

checking a vector table to determine whether to read the updates for the boot program to be loaded to the DSP from an internal ROM, a SRAM, or a combination of both; and after the checking, loading the updates for the boot program through a controller-to-DSP gateway to a DSP program memory.

12. (Currently Amended) A method as in claim 11 further comprising searching a storage location for [[a]] the DSP boot program with a micro-controller.

13. (Currently Amended) A method as in claim 11 further comprising searching for the updates to the DSP boot program with a micro-controller.

14. (Currently Amended) A method as in claim 11 further comprising searching the internal ROM for the DSP boot program.

15. (Canceled)

16. (Currently Amended) A method as in claim 11 further comprising searching the SRAM for the updates to the DSP boot program.

17. (Currently Amended) A method as in claim 11 further comprising searching an external ROM for the updates to the DSP boot program.

18. (Currently Amended) A method of processing an audio file located on a primary device's storage location comprising:

accepting a user request at a keypad;
converting the user request to an entry code;
transmitting the entry code to an audio device;
determining the function of the entry code at the audio device;
processing the audio file on the primary device's storage location, which is attached to a primary device, according to the function determined at the audio device, wherein the function includes is selected from the group consisting of recording a sound to the primary device's storage location, and providing a karaoke feature while the primary device is in the power saving mode, wherein the recording includes
processing the sound by a DSP, and
passing a processed sound from the DSP through a controller- to-DSP gateway to a
microcontroller to send to the primary device's storage location.

19. (Canceled)

20. (Original) The method of claim 18 wherein processing the audio file on the primary device's storage location according to the function recording sound to the primary device's storage location determined at the audio device comprises:

accepting a user request to record sound to a storage location, where the storage location is attached to the primary device;

transmitting the user request to record sound to a micro-controller;

accepting sound into a microphone;

receiving the sound accepted into the microphone into a CODEC;

converting the sound from an analog stream at the CODEC to a digital stream;

transmitting the digital stream from the CODEC to a digital interface;

receiving the digital stream from the digital interface into a DSP;

performing noise cancellation if necessary;

compressing the digital stream if necessary; and

writing the digital stream to a storage location.

21. (Original) The method of claim 18 wherein processing the audio file on the primary device's storage location according to the function determined at the audio device comprises:

transferring control of voice input to a primary device's microphone from a primary device to an audio device;

accepting sound into the microphone while an audio file controlled by an audio device is playing from a storage location;

amplifying the voice input at the microphone; and

outputting the voice after it has been amplified through a speaker at the same time the audio file being played is having its sound output through the speaker.

22. (Original) A method as in claim 18 further comprising comparing the entry code against a table of functions related to keypad entries when determining the function related to a keypad entry code.

23. (Original) A method as in claim 18 wherein the entry code comprises an entry in a table of entry codes, the table of entry codes further including corresponding functions associated with each entry code.
24. (Original) A method as in claim 18 wherein the audio file has a CD audio format.
25. (Original) A method as in claim 18 wherein the audio file has an MP3 format.
26. (Original) A method as in claim 18 wherein the audio file has a WAV format.
27. (Original) A method as in claim 18 wherein the audio file has an AAC format.
28. (Currently Amended) An apparatus comprising:
 - a micro-controller;
 - an input device coupled to the micro-controller, to receive user entries control a primary device's audio device when the primary device is in a power saving state;
 - an interface to the micro-controller, the interface to provide the micro-controller with access to a storage location, wherein the storage location is attached to the primary device;
 - a gateway coupled to the micro-controller;
 - a DSP coupled to the micro-controller through the gateway, wherein the DSP to read user requested files, decode user requested files, and to pass a decoded user requested files through the gateway to the micro-controller to write to user files to the storage location when the primary device is in the power saving state; and

an input/_output port coupled to the DSP, the input/output port to transmit a decoded audio stream out of the DSP and receive a digital signal into the DSP.

29. (Original) The apparatus of claim 28 wherein the interface is an IDE interface.
30. (Original) The apparatus of claim 28 wherein the storage location is a hard drive.
31. (Original) The apparatus of claim 28 wherein the storage location is a CD-RW drive.
32. (Original) The apparatus of claim 28 wherein the storage location is a flash memory.
33. (Original) The apparatus of claim 32 wherein the flash memory is a SmartMedia.
34. (Original) The apparatus of claim 28 wherein the primary device is a notebook computer.
35. (Original) The apparatus of claim 28 wherein the primary device is an audio jukebox.
36. (Original) An apparatus as in claim 28 further comprising a USB interface coupled to the micro-controller.
37. (Original) An apparatus as in claim 28 further comprising an I2C master port coupled to the micro-controller.

38. (Original) An apparatus as in claim 28 further comprising an I2C slave port coupled to the micro-controller.

39. (Original) An apparatus as in claim 28 further comprising a read only memory (ROM) coupled to the micro-controller.

40. (Original) An apparatus as in claim 28 further comprising an SRAM coupled to the micro-controller.

41. (Original) An apparatus as in claim 28 further comprising an SD flash controller coupled to the micro-controller.

42. (Original) The apparatus of claim 28 wherein the micro-controller includes an 8051 micro-controller.

43. (Original) An apparatus as in claim 28 further comprising a SmartMedia interface coupled to the micro-controller.

44. (Original) An apparatus as in claim 43 wherein the SmartMedia interface is further coupled to the DSP.

45. (Original) An apparatus as in claim 28 further comprising an AC link interface coupled to the DSP.

46. (Original) An apparatus as in claim 28 further comprising an I2S port coupled to the DSP.

47. (Original) An apparatus as in claim 28 wherein the apparatus is a single device.

48. (Original) An apparatus as in claim 28 wherein the apparatus is part of a single device.

49. (Original) An apparatus as in claim 28 further comprising a device which is external to the primary device.

50. (Original) An apparatus as in claim 28 further comprising a device which is internal to the primary device.

51. (Original) The apparatus of claim 28 wherein an interface coupled to the micro-controller comprises a plurality of interfaces.

52. (Original) The apparatus of claim 28 wherein a storage location comprises a plurality of storage locations.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.